

In June 2001, The Maine Department of Transportation (MaineDOT) inaugurated a research project to determine existing rates of bicycling and walking to school in the state. This project, entitled Maine Safe Ways to School, was undertaken with the expectation that the information learned through this project would be helpful in promoting bicycling and walking at other schools throughout the state.

MaineDOT is charged with implementing national transportation policy developed by the Federal Highway Administration to double the number of bicycling and walking trips in the U.S. while cutting in half the number of crashes involving bicyclists and walkers. This project was funded completely out of National Cooperative Highway Research Project funds provided to MaineDOT by the Federal Highway Administration.

MaineDOT has an ongoing interest in understanding the reasons why more students are not biking and walking to school, and under what conditions they might change their minds. Another reason to undertake this project is the health benefits associated with bicycling or walking to school understanding that the health behaviors that cause cardiovascular disease often develop in childhood. The key behavioral risk factors for cardiovascular disease are tobacco use, physical inactivity, poor nutrition and being overweight. Nationally the percentage of overweight young people has doubled since 1980. In Maine about 10% of teens are overweight and 15% are at risk for becoming overweight. In youth aged 5 to 15 there has been a 40% decrease in walking and bicycling nationally. In Maine only 5% of Maine high school students attend physical education classes daily.

Physical activity recommendations for children suggest that they need a variety of activities each day - some intense, some less intense, some informal, some structured. Walking or bicycling to or from school is an ideal way to get some of that activity at no extra cost to the child or family.

In addition to health benefits, the relative risks of school travel need to be considered. Statistics on transportation related fatalities for school-age children during normal school travel hours demonstrate that the school bus is the safest way for children to get to school, with less than 2% of the fatalities per 100 million student miles while bicycling had 6% of the fatalities, walking 16%, being driven by an adult 21%, and teen drivers 55%. It could be assumed that walking and bicycling to school would be safer, and that fewer passenger vehicles in school zones would reduce local area traffic congestion, and decrease pedestrian-vehicular conflicts.

In June 2001, every elementary school or school district in Maine was invited to be part of this research project. There was no cost involved for the school districts selected - all that was requested was the school's cooperation in conducting surveys and holding meetings as necessary.

MaineDOT selected four applicant school districts to participate in the research project. Selection was done to ensure a representative sample of urban and rural schools statewide. The locations of the four districts are shown on **Map 1** on the following page. The total enrollment of the schools was over 5,500 students.

The four schools or districts selected were:

- Lincoln School in Augusta (school location in a well-developed, traditional neighborhood setting)
- Westbrook School district (six schools located in a mixed urban/suburban community to the west of Portland)
- Maine School Administrative District 40 (MSAD 40) eight schools located in five rural Mid-coast municipalities
- Peru (one elementary school in a rural municipality in western Maine)

**Table 1**, on the next page is the complete list of participating schools.

Safe Ways to School Research Project  
Chapter 1 - Introduction

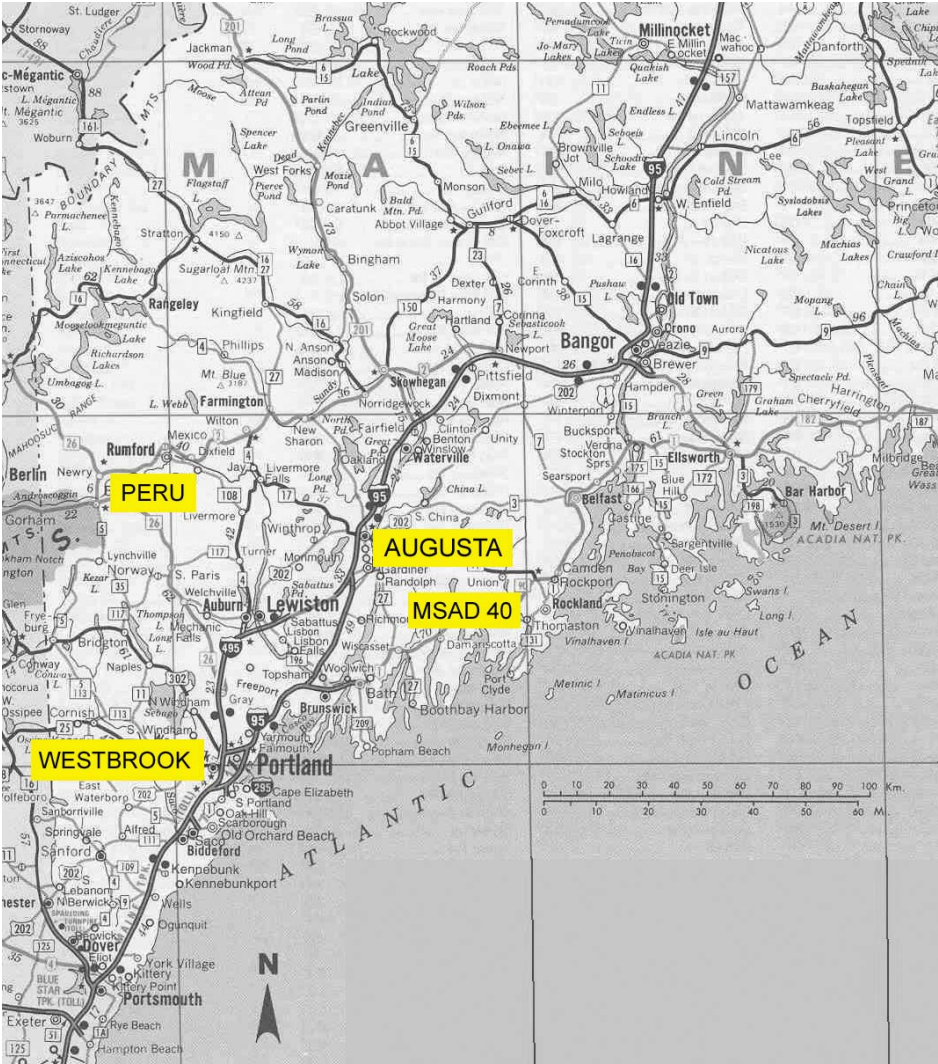


Table 1 Participating Schools and Enrollment in Fall 2001		
Schools	Community	Enrollment
<b>Westbrook</b>		
Prides Corner School	Westbrook	317
Saccarappa School	Westbrook	242
Canal School	Westbrook	276
Congin School	Westbrook	377
Wescott Middle School	Westbrook	688
Westbrook High School	Westbrook	963
<b>MSAD 40</b>		
Warren Community School	Warren	346
Union Elementary	Union	160
Miller School	Waldoboro	407
Prescott Memorial School	Washington	103
Friendship Village School	Friendship	99
A.D. Gray Middle School	Union	173
D.R. Gaul Middle School	Waldoboro	218
Medomak Valley High School	Waldoboro	743
Lincoln School	Augusta	270
Peru Elementary School	Peru	200
Total Students		5,582

To begin to evaluate these issues, MaineDOT selected a consultant team to assist in the facilitation of the research project. The research project began in the fall of 2001 with a survey of students and parents in the four districts to determine baseline mode of access to school, and attitudes about biking and walking to school.

After the survey, the research project studied some of the major barriers to walking and bicycling to school which were identified in the survey, and suggested implementation measures in each of the school districts to overcome these barriers. The implementation measures include both physical infrastructure improvements such as new sidewalks or crosswalks, as well as promotional events such as a Walk to School Day or a “walking school bus”.

This research project benefited from a wide range of input from the general public, advocacy organizations, and various State agencies. The Maine Safe Ways to School Advisory Committee was formed and we thank the following people who participated on this committee:

Harvey Boatman	Maine Dept. of Education
John DelVecchio	Maine State Planning Office
Raymond Halperin	MaineDOT, Augusta School Board member
Jeff Miller	Bicycle Coalition of Maine
Amy Root	Maine Nutrition Network
Keith Whalen	Maine Cardiovascular Health Program
Debbie Wigand	Maine Cardiovascular Health Program

The committee met at regular intervals through the course of this project. In addition, public meetings to discuss the survey and implementation measures were held in each of the four participating school districts.

This final report is divided into the following sections:

- Results of the survey are summarized in **Chapter 2** and in **the appendices**.
- **Chapters 3 through 6** present survey results and findings on bicycle pedestrian access at each of the 16 schools in the 4 districts studied
- **Chapter 7** summarizes recommendations for increasing biking and walking rates in Maine schools based on research at the selected schools
- **Chapter 8 discusses school siting policies as they affect biking and walking**
- **Chapter 9 is a synthesis of recommendations for municipalities, school districts, state agencies and the general public**

MaineDOT continues to evaluate ways to increase biking and walking at the state’s public schools. Ongoing implementation efforts are underway to encourage more biking and walking, and measure the effectiveness of these encouragement or infrastructure improvement projects.

Comments and inquiries regarding this report can be directed to:

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